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REMARKS

Claims 1-11

Claim 1 is an independent claim, from which claims 2-11 ultimately depend. Claims 1-11 have been rejected under 35 USC 103(a) as being unpatentable over Hubacher (6,711,688) in view of Dutcher (6,021,496). Applicant respectfully traverses the rejection of claim 1 as amended, such that claims 2-11 are patentable for at least the same reasons.

Prior to amendment, claim 1 was limited to an operating system having an initial boot sequence in which a network device driver for each component is loaded and network connectivity is established only after a user has logged in. The Examiner has stated that Hubacher in particular teaches this element of the claimed invention, because in Hubacher the user has to log into a server before the operating system is loaded from the server – such that the network device drivers for the operating system are loaded after the user has logged into the operating system. Thus, “under the broadest reasonable interpretation of the claims” (Office Action, p. 3), the Examiner concludes that Hubacher teaches this element of the claimed invention, such that claim 1 is unpatentable over Hubacher in view of Dutcher.

Applicant has in response amended claim 1 to make its subject invention more clear, so that it is more evident why Hubacher in view of Dutcher does not render claim 1 unpatentable. In particular, claim 1 is now not directed to an operating system, but rather to an “initial boot sequence” in which a network device driver is loaded and network connectivity is established only after a user has logged in, and where “the initial boot sequence is executed at least in part by a basic input/output system (BIOS) . . . without loading the network device drivers loading.” Support for this amendment is found in the originally filed patent application at least in the originally presented claims 5 and 6, which are directed to kernel loading without network device driver loading as part of the initial boot sequence, and to the BIOS executing the initial boot

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sequence without loading the network device drivers, as well as in the originally presented claims 12 and 17, which do not specify that the operating system performs the boot sequence (and thus providing additional support for removing this limitation from claim 1).

Applicant believes that the previous recitation of an operating system in claim 1 was a red herring, as the intent of the claimed invention is to have an initial boot sequence in which no network device drivers are loaded, and no network connectivity established, until after a user has logged into the computer. Claim 1 is now thus limited to a computer that has an initial boot sequence in which network device drivers are loaded, and network connectivity established, only after a user has logged in, where the initial boot sequence is at least in part executed by a BIOS without loading the network device drivers (and without any mention of an operating system to confuse issues). These are the limitations that Dutcher does not disclose, such that Hubacher in view of Dutcher does not render claim 1 unpatentable.

For instance, in the method of FIG. 4 of Hubacher, the pre-execution logon (PEL) sequence of Hubacher is shown in detail, in which in step 402 "the BIOS ROM chip initializes the system by executing post (Power-on Self-Test) code". (Col. 6, ll. 19-21) The NIC or MAC driver is thereafter loaded in step 422. (Col. 7, ll. 47-49) As can be appreciated by those of ordinary skill within the art, a NIC driver is a network interface controller (NIC) driver, and a MAC driver is a media access controller (MAC) driver, which are specific types of network device drivers. The BIOS in Hubacher thus loads network device drivers, after POST has been performed.

Once all of this has occurred, Hubacher in step 429 sends out a "PEL discovery frame" on the network, and waits for a "server responsive to the frame" sending "an acknowledgment" to the client computer. (Col. 8, ll. 50-55) Once the client computer receives this acknowledgment,

the client workstation will display a logon screen. The user at the client workstation will enter his or her user identification and password at the logon screen. Upon receipt of the user identification and password, the PEL will validate the user identification and password. The PEL [at the server] will send a [locally administered address, or LAA] to the workstation.

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(Col. 8, ll. 56-61) The process performed in Hubacher is thus as follows. The BIOS performs an initial boot sequence in which POST occurs, and thereafter network device drivers are loaded. Communication with a server is then attempted, and once such communication has been achieved, the user is presented with an opportunity to log on.

Therefore, it should be evident why Hubacher does not disclose the element of claim 1 as amended of an initial boot sequence in which network device drivers are not loaded, and network connectivity is not established, until after a user has logged in, where the initial boot sequence is executed at least in part by the BIOS without the network device drivers loading. In Hubacher, the BIOS loads the network device drivers prior to the user having any opportunity to log in, so Hubacher cannot disclose the element of claim 1 that the network device drivers are not loaded until after the user has logged in. As previously presented, the network device drivers of claim 1 were interpreted by the Examiner as pertaining to an operating system, such that Hubacher was interpreted as disclosing not loading such operating system network device drivers until after the user has logged in (because the operating system in Hubacher is not loaded until after the user has logged in). However, claim 1 in its present form, after amendment, makes it clear that this claim is limited to an initial boot sequence performed at least in part by the BIOS without the loading of the network device drivers, prior to the user logging in. Because Hubacher does indeed disclose loading network device drivers by the BIOS prior to the user logging in, Hubacher does not disclose this element of claim 1, such that Hubacher in view of Dutcher does not render the claimed invention unpatentable.

Applicant makes one final comment regarding Hubacher. The Examiner had relied upon the method of FIG. 7 of Hubacher, drawing a distinction that the operating system was not loaded until after the user has logged in at steps 740/742/750, such that the network device drivers for the operating system are not loaded in (obviously) until after the operating system has been loaded. However, in its current form, claim 1 is limited to an initial boot sequence in which network connectivity is established only after a user has logged in, and that is executed at least in

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part by a BIOS without loading the network device drivers. The loading of the network device drivers by the BIOS in Hubacher (to establish network connectivity) has been described above. It should also be apparent, however, that Hubacher performs this loading of the network device drivers by the BIOS in its method of FIG. 7. That is, in steps 720/730, the client machine is attempting to communicate with the server over a network. Obviously, for such communication to take place, the client machine has to load network device drivers prior to loading the operating system, and specifically by the BIOS – at the very least, the client machine has to establish network connectivity before loading the operating system, since it communicates with the server prior to loading the operating system. Applicant brings this up just to make clear that the particular part of Hubacher that the Examiner relied upon – the method of FIG. 7 – also supports the interpretation of Hubacher presented above.

In sum, then, the distinction that Applicant is drawing is that claim 1 as has been amended is limited to an initial boot sequence in which network device drivers are not loaded and in which network connectivity is not established until only after a user has logged in, where the initial boot sequence is executed at least in part by a BIOS without loading the network device drivers. What Applicant has attempted to show above is that Hubacher definitively discloses loading network device drivers by the BIOS, and the establishment of network connectivity, prior to the user logging on. Hubacher only enables logon by the user after communication has been made with a server, and such communication can only be made if there is network connectivity. Therefore, Hubacher does not disclose the element of claim 1 that has been discussed here, such that Hubacher in view of Dutcher does not render the claimed invention obvious and unpatentable.

Claims 12-20

Claims 12 and 17 are independent claims, from which claims 13-16 and 18-20, respectively, depend. Claims 12-20 have also been rejected under 35 USC 103(a) as being unpatentable over Hubacher in view of Dutcher. As originally presented, claims 12 and 17, like

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claim 1 as has been amended and discussed above, are not limited to a boot sequence with respect to an operating system. That is, claims 12 and 17 are limited to a boot sequence in which network device drivers are not loaded until the user has logged in. Therefore, claims 12 and 17 are patentable over Hubacher in view of Dutcher for at least the same reasons that claim 1 is, such that all of claims 12-20 are patentable.

Conclusion

Applicant has very much made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mike Dryja, Applicant's Attorney, at 425-427-5094, so that such issues may be resolved as expeditiously as possible. For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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Date

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